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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,322	01/29/2004	Richard L. Giroux	WEAT/0343	5490

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EXAMINER

NEUDER, WILLIAM P

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,322

Applicant(s)

GIROUX ET AL.

Examiner

William P. Neuder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-47 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/15/05, 1/21/05, 11/4/04, 11/11/04, 6/7/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4-14,17-20,22,25-27,29-40 and 42-47 are rejected under 35

U.S.C. 102(b) as being anticipated by Brown 2,572,309.

Brown discloses a method of completing a well and a cementing plug used in the completion. A tubular 42 is positioned within the well. A one-way traveling plug 34 is disposed within the tubing. Gripping means 39 are used to engage the tubing. Cement is placed in the annular area between the tubing and the well. As to claim 4, the plug separates the cement from the displacement fluid (see col. 3, lines 38-74). As to claim 5, cement is prevented from flowing from the annular area into the tubing. As to claim 6, tubing 42 is casing. As to claim 7, the gripping members can be actuated by pressure differential (see col. 4, lines 19-27). As to claim 8, the plug is made to be drilled through (see col. 5, lines 1-10). As to claim 9, drilling through the plug is by use of a second tubular carrying a drilling member. As to claim 10, when the gripping members 39 are actuated, the plug is prevented from moving in a first axial direction. As to claim 11, the gripping members are actuated by fluid pressure. As to claim 12, sealing means 27 are provided. As to claim 13, a bore (unnumbered) is provided through the cement plug. As to claim 14, means 21 seal the bore. As to claim 17, a

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second sealing means 19 is provided. As to claim 18, the body has a sloped portion 1 for biasing the gripping means outward. As to claim 19, means 35 and 36 act as a drag element for urging the gripping means along the sloped portion. As to claim 20, the drag means urge the gripping means in an axial direction. As to claim 22, the gripping means are radially expandable. As to claim 25, the plug is selectively positioned within the well. As to claim 27, the gripping member has hollowed out portions between the teeth. As to claim 29, the gripping means prevent movement upwardly but allow downward movement. As to claims 30 and 31, the gripping means do not engage the casing when the plug moves downward. As to claim 32, the gripping means are actuated to prevent movement of the plug. As to claim 33, cement is provided in front of the plug and a displacement fluid is provided behind the plug. As to claim 34, the gripping members are expanded into contact with the casing. As to claim 35, the gripping members are urged outward along a sloped portion 10. As to claim 36, the gripping members are urged outward at a desired location. As to claims 37-39, the tool is used in a hydrocarbon well. As to claim 40, the tool is used to place cement into the well. As to claim 42, the tool is actuated by fluid pressure. As to claim 43, the tool is a cementing plug. As to claims 44 and 45, the plug separates the cement from the displacement fluid. As to claims 46 and 47, the tool can be moved to another location after the gripping means have been actuated.

Claims 1,6,7;10,12-14,17,18,21-27,29,32,34-40,43,46 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Church et al 2,305,062.

Church discloses a cementing plug and method of cementing. A one way traveling plug 1 is placed within tubing 22 in a well. Gripping means 21 are used to engage the tubular. Cement is located in the annular area between the tubing and wellbore (see fig. 2). As to claim 6, the tubing is casing. As to claim 7, the gripping means are actuated by differential pressure. As to claim 10, the gripping means prevent movement of the cement plug in an axial direction. As to claim 12, sealing means 8 are provided. As to claim 13, a bore 28 is provided in the plug. As to claim 14, valve means 2 seal the bore. As to claim 17, a second sealing means 17 is provided. As to claim 18, a sloped portion 9 is provided. As to claim 21, a biasing means 23 is provided around the gripping member. As to claim 22, the gripping members are radially expandable. As to claim 23, a valve 2 is disposed within the plug. As to claim 24, the valve is a single direction valve. As to claim 25, the plug is selectively positioned within the tubing. As to claim 26, the gripping members are formed from a drillable material. As to claim 27, the gripping means are hollowed out forming teeth. As to claim 29, the gripping members prevent movement of the tool in one direction. As to claim 34, the gripping members are expandable. As to claim 35, the gripping members are urged outward along the sloped portion. As to claims 37-39, the tool is a downhole tool used in a hydrocarbon well. As to claim 40, cement is placed within the well. As to claim 43, the tool is a cement plug. As to claims 46 and 47, the tool can be engaged and then disengaged and moved within the well.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown or Church et al (both described above).

The location that the cementing plug is used would have been considered an obvious design choice. It would have been considered obvious to use the tool of Church or Brown in a pipeline since technically an oil well is a pipeline.

Claims 15,16 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (described above) in view of Rogers et al 6,318,472.

Brown is considered to disclose all of the claimed features except for the use of a shearable means and for the use of castellations. Rogers teaches that it is known to use a shearable means blocking the bore to allow the cement to be pumped out through the plug following shearing of the member. It would have been considered obvious to provide brown with a shearable member as taught by Rogers since the use of a shearable member allows better control of the cementing operation. It would have been obvious to provide the plug of Brown with castellations as taught by Rogers since the use of castellations provides an anti-rotation means to allow easier drilling out of the plug. As to claim 16, the shearable means of Rogers is shearable by differential pressure.

Allowable Subject Matter


Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William P Neuder
Primary Examiner
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W.P.N.